### INCLUDES CHANGE 1

# **VEHICLE MAINTENANCE CONTROL AND ANALYSIS**

- 1. Objective. As prescribed in AFR 8-10, this ANGMS quantifies the manpower requirement to accomplish the tasks described in the work center description (WCD) for varying levels of workload volume.
- 2 Authority. AFM 77-310, Vol II, series of Air Force and Air National Guard directives contain command policy and procedural guidance for the Vehicle Maintenance Control and Analysis work center. This ANGMS has been developed in accordance with procedures contained in AFR 25-5. This ANGMS is the result of a functional review.

## 3. Applicability:

- a. This standard applies to all ANG units operating a Vehicle Maintenance Control and Analysis function,
- b. Bases undergoing AFR 26-1 cost comparison studies will be exempt from standards application. This standard does not apply to locations that have completed cost comparison studies and remained in-house.

### 4. Standard Data:

- a. Classification. Type II.
- b. Approval Date.
- Man-Hour Data Source. Operational Audit (historical record and technical estimate technique).
   Standard Man-Hour Equation. YC = 30.42 + 1.002X
- e. Workload Factor:
  - (1) Title. A Vehicle Assigned.
- Definition. The average monthly number of vehicles and or pieces of equipment assigned that vehicle maintenance is responsible for maintaining, regardless of the owning command or using activity. Use the average of 12 consecutive months of workload factor data.
- (3) Source. Vehicle Master List PCN S0009-023. Obtain the count from entry on last page titled "VEH TOT."

### 5. Application Instructions:

- a. The valid man-hour range of 81.18 to 245.70 at Attachment 2 will not be exceeded.
- b. The AF Form 1113, Standard Manpower Table, is an aggregate of total manpower by specialty title and AFSC. The application instructions are as follows:
- (1) Obtain the most current WLF value as instructed in paragraph 4 above, using the average of 12 months data.
  - (2) Substitute this value into the man-hour equation for X.
- (3) Divide the results of the equation (YC) by the current man-hour availability factor (MAF) to determine total requirements.
- (4) Find the column in which the number of total requirements falls, then read up and across the column to determine total manpower by AFSC.
- 6. Statement of Conditions. The normal hours of operation for this work center are 8 hours a day, 5 days a week. There are no other standard of living constraints which affect the daily operation of this work center.

# BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

E. DARDEN BAINES Chief **Administrative Services** 

2 Attachments

1. Work Center Description 2. Standard Manpower Table

SUMMARY OF CHANGES Applicability, paragraph 3a, was changed to incorporate the standard's applicability to all ANG units.

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### WORK CENTER DESCRIPTION

### Vehicle Maintenance Control and Analysis

### DIRECT:

- 1. WORKLOAD CONTROL:
- 1.1. CONTROLS SCHEDULED MAINTENANCE:
- 1.1.1. REVIEWS SCHEDULED MAINTENANCE REPORT. Reviews Scheduled Maintenance Report to determine if inspection is due or required.
- 1.1.2. REVIEWS VEHICLE HISTORICAL RECORD. Reviews Vehicle Historical Record for repetitive maintenance or component failure that may be covered by warranty.
- 1.1.2.1. REVIEWS AND ANALYZES REPETITIVE MAINTENANCE PROBLEM.
- 1.1.2.2. NOTIFIES VEHICLE MAINTENANCE SUPERINTENDENT.
- 1.1.3. CHECKS VEHICLE STATIC MAINTENANCE DATA. Checks Vehicle Static Maintenance Data to ensure vehicle is required for maintenance.
- 1.1.4. CHECKS VEHICLE MASTER LIST. Checks Vehicle Master List/Quick Reference List to ensure that repair limit will not be exceeded. Notifies Vehicle Maintenance Officer or superintendent for approval if limit is going to be exceeded.
- 1.1.5. COORDINATES WITH USING ORGANIZATION:
- 1.1.5.1. REQUESTS VEHICLE DELIVERY. Requests using organization to deliver vehicle.
- 1.1.5.2. RECEIVES VEHICLE. Receives vehicle from using organization; debriefs operator to determine if additional work is required; reviews Serv-O-Plate for accuracy; and reviews inspection card and waiver card for required maintenance.
- 1.1.5.3. NOTIFIES USING ORGANIZATION. Notifies using organization when repairs are complete.
- 1.1.6. RESPONDS TO VEHICLE STATUS INQUIRY.
- 1.1.7. OPENS VEHICLE AND EQUIPMENT WORK ORDER. Assigns work order number and maintenance priority; indicates maintenance required; and assigns work order to vehicle maintenance.
- 1.1.8. CLOSES WORK ORDER. Checks vehicle and equipment work order for accuracy; closes work order; and updates Vehicle Historical Record.
- 1.2. CONTROLS UNSCHEDULED MAINTENANCE:
- 1.2.1. COORDINATES WITH USING ORGANIZATION:
- 1.2.1.1. REQUESTS VEHICLE DELIVERY. Requests using organization to deliver vehicle.

- 1.2.1.2. RECEIVES VEHICLE. Receives vehicle from using organization; debriefs operator to determine if additional work is required; reviews Serv-O-Plate for accuracy; and reviews inspection card and waiver card for required maintenance.
- 1.2.1.3. NOTIFIES USING ORGANIZATION. Notifies using organization when repairs are complete.
- 1.2.2. RESPONDS TO VEHICLE STATUS INQUIRY.
- 1.2.3. REVIEWS SCHEDULED MAINTENANCE REPORT. Reviews scheduled Maintenance Report to determine if inspection is due or required.
- 1.2.4. REVIEWS VEHICLE HISTORICAL RECORD. Reviews Vehicle Historical Record for repetitive maintenance or component failure that may be covered by warranty.
- 1.2.4.1. REVIEWS AND ANALYZES REPETITIVE MAINTENANCE PROBLEM.
- 1.2.4.2. NOTIFIES VEHICLE MAINTENANCE SUPERINTENDENT.
- 1.2.5. CHECKS VEHICLE MASTER LIST. Checks Vehicle Master List to ensure repair limit will not be exceeded; and notifies maintenance superintendent for approval if limit is going to be exceeded.
- 1.2.6. OPENS VEHICLE AND EQUIPMENT WORK ORDER. Assigns work order number, maintenance priority; indicates maintenance required; assigns work order to vehicle maintenance; and determines type of work order.
- 1.2.7. CLOSES WORK ORDER. Checks vehicle and equipment work order for accuracy; closes work order; and updates Vehicle Historical Record.
- 1.3. UPDATES MAINTENANCE CONTROL STATUS BOARD. Updates maintenance control status board by attaching Vehicle Historical Record, Operators Inspection Guide and Trouble Report, and vehicle and equipment work order.
- 1.4. MONITORS AWAITING MAINTENANCE. Monitors awaiting maintenance suspense file; schedules vehicle and/or equipment; and posts status board with copy of work order and Vehicle Historical Record.
- 1.5. MONITORS DEFERRED MAINTENANCE. Monitors deferred maintenance work order and coordinates with materiel control technician for status and follow up action.
- 1.6. MONITORS QUALITY DEFICIENCY REPORT (QDR)/MATERIAL DEFICIENCY REPORT (MDR) PROGRAM. Monitors QDR/MDR programs; maintains ledger for assigning activity report numbers; assists in preparation of report; and performs follow up action.
- 1.7. MONITORS VEHICLE DEADLINED FOR PARTS (VDP) ACTION:
- 1.7.1. COORDINATES WITH MAINTENANCE SUPERINTENDENT. Coordinates with maintenance superintendent and places vehicle and/or equipment on VDP status.
- 1.7.2. PLACES WORK ORDER ON STATUS BOARD. Places work order and historical record on VDP section of status board.

- 1.7.3. COORDINATES WITH MATERIEL CONTROL. Coordinates with material control technician to ensure parts are on order.
- 1.7.4. SCHEDULES VEHICLE. Schedules vehicle and/or equipment for required maintenance when parts are received.
- 1.8. DEVELOPS ANNUAL SCHEDULED MAINTENANCE PLAN. Develops and maintains annual Scheduled Maintenance Plan for total vehicle fleet.
- 1.9. INITIATES VEHICLE ABUSE ACTION. Notifies maintenance superintendent and organization if vehicle abuse or suspected abuse is discovered.
- 1.10. MONITORS CANNIBALIZATION REQUIREMENT. Determines if cannibalization is required; and forwards work order and Record of Cannibalization to maintenance superintendent for approval.
- 1.11. INITIATES PROCUREMENT ACTION:
- 1.11.1. REVIEWS LACK OF MAINTENANCE CAPABILITY NOTIFICATION. Reviews notification that repair is beyond maintenance capability.
- 1.11.2. INITIATES WORK ORDER. Initiates contract maintenance vehicle and equipment work order with applicable contract maintenance work order number; obtains approval; and forwards AF Form 9, Request for Purchase, to procurement.
- 1.11.3. CONTROLS MOVEMENT OF VEHICLE OR ASSEMBLY:
- 1.11.3.1. RECEIVES NOTIFICATION. Receives name of contractor and when and where vehicle or assembly is to be delivered; and annotates appropriate form.
- 1.11.3.2. ARRANGES FOR MOVEMENT OF VEHICLE AND/OR EQUIPMENT. Arranges for movement of vehicle and/or equipment to and from contractor.
- 1.11.4. TAKES FOLLOW-UP ACTION. Takes follow-up action to determine repair status.
- 1.11.5. RECEIVES NOTIFICATION. Receives notification when work is completed.
- 1.11.6. ENSURES INSPECTION OF VEHICLE AND/OR ASSEMBLY. Ensures vehicle and/or assembly is inspected prior to acceptance.
- 1.11.7. CLOSES WORK ORDER. Checks vehicle and equipment work order for accuracy; closes work order; and updates Vehicle Historical Record.
- 1.12. INITIATES WARRANTY ACTION:
- 1.12.1. **DETERMINES WARRANTY**. Determines if vehicle and/or component is under warranty and determines if value gained exceeds cost of executing warranty.
- 1.12.2. INITIATES WORK ORDER. Initiates warranty work order.
- 1.12.3. COORDINATES TRANSPORT OF VEHICLE. Locates dealer; coordinates transport of vehicle and/or equipment to and from dealer.

- 1.12.4. TAKES FOLLOW-UP ACTION. Takes follow-up action by checking with dealer to determine repair status.
- 1.12.5. RECEIVES NOTIFICATION. Receives notification when work is completed.
- 1.12.6. ENSURES INSPECTION OF VEHICLE AND/OR ASSEMBLY. Ensures vehicle and/or assembly is inspected prior to acceptance.
- 1.12.7. CLOSES WORK ORDER. Checks vehicle and equipment work order for accuracy; closes work order; and updates Vehicle Historical Record.
- 1.13. MONITORS DEPOT REPAIR REQUIREMENT. Identifies vehicle and/or equipment for depot repair; coordinates with maintenance superintendent for action; and processes depot maintenance request.
- 1.14. DOCUMENTS ACCIDENT REPAIR ACTION:
- 1.14.1. INITIATES VEHICLE AND EQUIPMENT WORK ORDER. Initiates work order reflecting estimated repair cost associated with accident; and forwards copy of work order to operations clerk.
- 1.14.2. DOCUMENTS RESULT. Documents result of operational check after repair is completed on initial work order; and shows accident repair separate from normal workload.
- 1.14.3. CLOSES COMPLETED WORK ORDER. Closes out completed work order; checks work order for accuracy; and updates Vehicle Historical Record.
- 1.15. PROCESSES REPAIR WAIVER. Processes Request for Waiver on onetime repair allowance and processes request for vehicle disposition.
- 1.16. MONITORS VEHICLE AND/OR EQUIPMENT IN REPLACEMENT CODES A THROUGH J. Reviews list of vehicle and/or equipment in replacement codes A through J; determines which are not programmed for replacement during the year; and selects best of these for mechanical upgrade.
- 1.17. PERFORMS YARD CHECK. Physically inspects and annotates registration number of all vehicles in vehicle maintenance parking areas; and ensures all vehicles have been accepted for maintenance.
- 1.18. RECEIVES NEW VEHICLE:
- 1.18.1. OPENS WORK ORDER. Reviews new vehicle; opens work order; and conducts acceptance inspection.
- 1.18.2. CLOSES WORK ORDER. Closes work order upon completion of acceptance inspection.
- 1.18.3. COLLECTS STATIC DATA. Collects static data for A, B, and C card, and initiates documentation necessary for vehicle historical record and Vehicle Integrated Management System (VIMS) input.
- 1.18.4. INITIATES HISTORICAL FILE. Initiates historical file when vehicle and/or equipment is received.
- 1.19. MAINTAINS FILE. Adds and removes forms from record file; annotates file as required; and maintains work order suspense file of completed work orders by vehicle registration number and date sequence.

- 1.20. PROCESSES DATA FOR VEHICLE TRANSFER. Transfers accountability and billing data from using organization to temporary duty (TDY) organization requiring vehicle support.
- 1.21. PROCESSES END OF MONTH WORK ORDER. Closes out partial work order and reinitiates for next month.
- 1.22. PREPARES DEFENSE PROPERTY DISPOSAL RECORD. Prepares record when vehicle and/or equipment is scheduled for transfer or turn-in to Defense Property Disposal Office.
- **1.23. ISSUES AND CONTROLS IMPRINTER.** Embosses and maintains AF Form 1252, USAF Vehicles Serv-O-Plate, for vehicles/equipment supported by vehicle maintenance activity.
- 1.24. CONTROLS TIME COMPLIANCE TECHNICAL ORDER (TCTO) ACTION:
- 1.24.1. PROCESSES RECEIPT OF TCTO. Date stamps TCTO upon receipt; reviews TCTO to determine if it affects assigned vehicle and/or equipment.
- 1.24.2. PREPARES TCTO WORK ORDER. Prepares TCTO work order and enters on work order control log.
- 1.24.3. SCHEDULES TCTO KIT INSTALLATION. Schedules TCTO kit installation into vehicle and/or equipment; and ensures TCTO is completed.
- 1.24.4. DOCUMENTS TCTO ACTION. Documents completion of TCTO on Vehicle Historical Record.
- 1.24.5. MAINTAINS MASTER TCTO FILE. Maintains a master TCTO file containing active and inactive TCTOs, commercial technical bulletin onetime inspection, and TCTO related message and letter.
- 1.24.6. COORDINATES WITH SUPERINTENDENT. Coordinates with superintendent on action necessary to expedite completion of unaccomplished TCTO's.
- 1.24.7. TAKE FOLLOW-UP ACTION. Takes follow-up action as necessary.
- 1.24.8. INFORMS AIR LOGISTICS CENTER (ALC). Informs ALC of completed TCTO.
- 2. DATA ANALYSIS:
- 2.1. MONITORS AND MAINTAINS COMPUTER GENERATED LISTING:
- 2.1.1. OBTAINS MACHINE LISTING. Obtains machine listing from data automation work center.
- 2.1.2. SEPARATES MACHINE LISTING. Separates multi-ply machine listing as necessary and ensures correct distribution is made.
- 2.1.3. REVIEWS MACHINE LISTING. Reviews machine listing for error.
- 2.1.4. CORRECTS MACHINE LISTING. Initiates corrective action to correct error found in machine listing.
- 2.1.5. PERFORMS PRODUCTION/DEFICIENCY ANALYSIS. Analyzes summary as necessary for purpose of bringing out-of-range or undesirable performance to an acceptable level; identifies and documents problem area; and briefs superintendent on findings of analysis.
- 2.1.5.1. ANALYZES VOC RATE.

- 2.1.5.2. ANALYZES VEHICLE DEADLINED FOR MAINTENANCE (VDM) RATE.
- 2.1.5.3. ANALYZES VDP RAT
- 2.1.5.4. ANALYZES OPERATIONS AND MAINTENANCE COST.
- 2.1.5.5. ANALYZES VEHICLE UTILIZATION.
- 2.1.5.6. PROVIDES ANALYSIS TO SUPERINTENDENT.
- 2.1.6. FILES MACHINE LISTING. Files machine listing for future analysis.
- 2.1.7. DESTROYS MACHINE LISTING. Destroys machine listing as prescribed by directive.
- 2.2. CONDUCTS SPECIAL STUDY. Collects, extracts, analyzes, compiles, and reviews vehicle operations and maintenance data for comparative study, report, and summary.
- 3. DATA SUPPORT:
- 3.1. PERFORMS REGISTERED EQUIPMENT MANAGEMENT SYSTEM/VEHICLE INTEGRATED MANAGEMENT SYSTEM (REMS/VIMS) INTERFACE. Compares REMS/VIMS data to identify discrepancies; and takes follow-up action as required.
- 3.2. INPUTS DATA:
- 3.2.1. REVIEWS DATA. Reviews raw data on work order to ensure accuracy prior to initiating machine listing.
- 3.2.2. CORRECTS DATA. Corrects logic error in raw data.
- 3.2.3. PROCESSES DATA. Processes data into computer; and submits floppy disk to data processing.
- 3.3. MAINTAINS DISK:
- 3.3.1. MAINTAINS DISK FILE. Maintains file of working and master diskettes; formats disk; registers software and monitors warranty.
- 3.3.2. MANAGES DATA BACKUP PROGRAM. Ensures data backup procedures have been developed; maintains backup diskette and tape file; and ensures backup of data is performed.
- 4. TECHNICAL LIBRARY:
- 4.1. ESTABLISHES REQUIREMENT. Establishes requirement for technical publication.
- **4.2. ORDERS TECHNICAL PUBLICATION.** Orders required technical publication, revision, change, or supplement by submitting TCTO or T.O. publication requirement table.
- 4.3. MAINTAINS PUBLICATION INDEX. Maintains publication index and T.O. file card.
- 4.4. MAINTAINS TECHNICAL PUBLICATION. Maintains technical publication, revision, change, or supplement as received.

- 4.5. PURGES TECHNICAL ORDER PUBLICATION. Purges technical order publication when vehicle/equipment tech order is no longer required.
- 4.6. PERFORMS INSPECTION. Performs annual inspection of technical publication, revision, change, or supplement to ensure currency.

INDIRECT: Indirect work involves those tasks that are not readily identifiable with the work center's specific product or service. The major categories of standard indirect work are Supervision, Administration, Meetings, Training, Supply, Equipment Maintenance, and Cleanup. See AFMS OOAA for the standard indirect description.

STANDARD MANPOWER TABLE															
WORK CENTER TITLE/CODE  Vehicle Maint Control/4242				STANDARD APPLICABILITY MANHOUR RANGE  81.18 245.70											
AIR FORCE SPECIALITY TITLE	AFSC	GRADE		MANPOWER REQUIREMENT											
Vehicle Maint Control & Analysis Supervisor  Vehicle Maint Control &	47274	CIV	1	1											
Analysis Specialist	47254	CIV		1											
					-										
TOTAL		1	2												
AIR FORCE SPECIALITY TITLE	AFSC	GRADE	MANPOWER REQUIREMENT												
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25 Mar 91

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BY ORDER OF THE SECRETARY OF THE AIR FORCE

JOHN B. CONAWAY Lieutenant General, USAF Chief, National Guard Bureau

**OFFICIAL** 

E. DARDEN BAINES Chief Administrative Services